

WHAT IS CLAIMED IS:

1. A surface acoustic wave device comprising two or more transducers formed on a piezoelectric substrate and including a pair of regions, each of the regions having a pair of comb electrodes whose surface wave propagation directions are opposite to each other, wherein at least two of the transducers are connected in parallel to each other.

2. The surface acoustic wave device according to claim 1, wherein each of the transducers has a triple-mode resonant frequency characteristic.

3. The surface acoustic wave device according to claim 2, wherein if one of the transducers connected in parallel has resonant frequencies of F_{l1} , F_{c1} and F_{u1} and another transducer has resonant frequencies of F_{l2} , F_{c2} and F_{u2} , the resonant frequencies are expressed as follows:

$$F_{l1} < F_{l2} < F_{c2} < F_{c1} < F_{u1} < F_{u2}.$$

4. The surface acoustic wave device according to claim 2, wherein if one of the transducers connected in parallel has resonant frequencies of F_{l1} , F_{c1} and F_{u1} and another transducer has resonant frequencies of F_{l2} , F_{c2} and F_{u2} , a phase of the resonant frequency F_{l1} is opposite to that of the resonant frequency F_{l2} , a phase of the resonant frequency F_{c1} is opposite to that of the resonant frequency F_{c2} , and a phase of the resonant frequency F_{u1} is opposite to that of the resonant

frequency $Fu2$.

5 5. The surface acoustic wave device according to claim 2, wherein if one of the transducers connected in parallel has resonant frequencies of $F11$, $Fc1$ and $Fu1$ and another transducer has resonant frequencies of $F12$, $Fc2$ and $Fu2$, respective intervals of at least four resonant frequencies are almost equal to each other.

10 6. The surface acoustic wave device according to claim 2, wherein if one of the transducers connected in parallel has resonant frequencies of $F11$, $Fc1$ and $Fu1$ and another transducer has resonant frequencies of $F12$, $Fc2$ and $Fu2$, insertion losses of at least four of the resonant frequencies are almost equal to each other.

15 7. The surface acoustic wave device according to claim 1, wherein one of the transducers connected in parallel and another transducer are formed on a single chip.

20 8. The surface acoustic wave device according to claim 1, wherein one of the transducers connected in parallel and another transducer are formed on different chips.